## MARCH/FY06

# ARNG-MTC FORT PICKETT Virginia

Army Defense Environmental Restoration Program Installation Action Plan

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## Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Cleanup Program for an installation. The plan will identify environmental cleanup requirements at each site or area of concern, and propose a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations, necessary remedial actions, and long term maintenance.

In an effort to coordinate planning information between the restoration manager, US Army Environmental Center (USAEC), Army National Guard-Maneuver Training Center (ARNG-MTC) Fort Pickett, and the National Guard Bureau (NGB), an IAP was completed. The IAP is used to track requirements, schedules, and tentative budgets for all Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following agencies contributed to the formulation and completion of this 2006 Installation Action Plan for ARNG-MTC Fort Pickett:

#### Company/Installation/Branch

ARNG-MTC Fort Pickett Environmental Office

**EEI for USAEC** 

ICI LLC for USAEC

## Acronyms

AEDB-R Army Environmental Database – Restoration

AOC Area of Concern

ARNG-MTC Army National Guard- Maneuver Training Center

CERCLA Comprehensive Environmental Response, Compensation and Liability Act of

1980

CLIN Contract Line Item Number

DA BRAC Department of Army Base Realignment and Closure

DCE Dichloroethene

DERP Defense Environmental Restoration Program

DD Decision Document

EBS Environmental Baseline Survey ER,A Environmental Restoration, Army

FS Feasibility Study

FTPIC ARNG-MTC Fort Pickett (as designated in AEDB-R)

FUA Facility Use Agreement

FY Fiscal Year

IAP Installation Action Plan IRA Interim Remedial Action

IRP Installation Restoration Program

LTM Long Term Management

MARSSIM Multi-Agency Radiation Survey and Site Investigation Manual

MC Munitions Constituents

MMRP Military Munitions Response Program

MTC Maneuver Training Center

NFA No Further Action
NGB National Guard Bureau
NPL National Priorities List
PA Preliminary Assessment
PBC Performance Based Contract
PCB Polychlorinated Biphenyl
PID Photoionization Detector

POM Program Objective Memorandum

POW Prisoner of War RA Remedial Action

RA(C) Remedial Action (Construction) RAB Restoration Advisory Board

RACER Remedial Action Cost Engineering & Requirements

RC Response Complete RD Remedial Design

REM Removal

RI Remedial Investigation ROD Record of Decision

RRSE Relative Risk Site Evaluation

SI Site Inspection

TAPP Technical Assistance for Public Participation

## Acronyms

TRC Technical Review Committee

USACHPPM United States Army Center for Health Promotion and United States Army

Center for Preventive Medicine (formerly called USAEHA)

USAEC United States Army Environmental Center

USAEHA United States Army Environmental Hygiene Agency (currently called

USACHPPM)

USAR US Army Reserves

USEPA United States Environmental Protection Agency

VAARNG Virginia Army National Guard

VDEQ Virginia Department of Environmental Quality

VRP Voluntary Remediation Program

### **Installation Information**

*Installation Locale:* ARNG-MTC Fort Pickett is located in southern Virginia in Brunswick, Dinwiddie, and Nottoway Counties. The site consists of approximately 41,648 acres and is operated by the Virginia Army National Guard (VAARNG).

Fort Pickett lies in the southern Piedmont region of Virginia. Fort Pickett is located approximately 60 miles southwest of Richmond and 35 miles west of Petersburg on US Route 460. Fort Pickett is bordered to the north by US Route 460 and State Highway 40, and to the west by State Highway 46. The surrounding region is agricultural, and the closest town is Blackstone, VA, whose center is approximately one mile west of the installation. The climate of the area is usually temperate.

Installation Mission: The ARNG-MTC Fort Pickett is an active training facility, currently used as a headquarters for VAARNG. From 1961 to the present, active US Army, US Army Reserve (USAR) Command, VAARNG, US Navy and US Air Force units have trained at Fort Pickett, with new construction and renovations continuing to support the training mission. In 1995, Fort Pickett was selected for closure under the BRAC. Since 1995, the installation has been known as Maneuver Training Center (MTC)-Fort Pickett and operates as a heavy training center.

#### Environmental Organization:

Major Command: US Army Environmental Center and National Guard Bureau

**Subcommand: VAARNG** 

**Installation:** ARNG-MTC Fort Pickett

#### Lead Executing Agency:

USAEC, Aberdeen Proving Ground, MD for the National Guard Bureau, Army National Guard Directorate

#### Regulatory Participation

Federal: US Environmental Protection Agency (USEPA) Region III

State: Commonwealth of Virginia Department of Environmental Quality (VDEQ)

**National Priorities List (NPL) Status:** The ARNG-MTC Fort Pickett site is a non-NPL site.

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status: A RAB for the ER,A site is not anticipated. A Public Communication Plan has been developed as part of the Sampling and Analysis Plan for Cleanup of Former PCB Transformer Storage Area (PA-35) at the Fort Pickett Army National Guard – Maneuver Training Center (ARNG-MTC) Fort Pickett, Virginia, MKM, - September 2005.

## **Installation Information**

#### Installation Program Summaries

#### IRP

Primary Contaminants of Concern: Metals (Lead and Arsenic) and Aroclor 1260

Affected Media of Concern: Soil, possibly Shallow Groundwater

Estimated Date for Response Complete (RC): 2007

Funding to Date (up to FY05): \$1,356,895

Current Year Funding (FY06): \$0

Cost-to-Complete (FY07+): \$805,000 (remaining optional Contract Line Item Numbers

(CLINs) for PBC)

#### Military Munitions Range Program (MMRP)

(the single MMRP site is Response Complete)

Primary Contaminants of Concern: Munitions Constituents (MC)

Affected Media of Concern: Soil, Groundwater

Date for RC: 2005

Funding to Date (up to FY05): \$187,859

Current Year Funding (FY06): \$0 Cost-to-Complete (FY07+): \$0

### Cleanup Program Summary

#### Installation Historic Activity

Fort Pickett was purchased by the US Government in 1941 and was activated as the Blackstone Military Area. In 1942, it was dedicated as Camp Pickett, named after General George E. Pickett who led the Confederate charge at Gettysburg. During WWII, Camp Pickett was a major combat training installation, with a peak number of 85,000 troops stationed at the Post in 1943. Part of Fort Pickett was used as a Prisoner of War (POW) camp for Axis soldiers captured in Europe. The US Army discontinued combat training at Fort Pickett in the fall of 1944 and closed the facility at the end of WWII. It was briefly reopened during 1948 and closed again in 1949, and then reactivated in 1950 as a medical replacement US Army training center during the Korean War. Armored unit training resumed during the early 1950s. The present training mission was assigned in 1960. From 1961 to the present, active US Army, US Army Reserve (USAR) Command, VAARNG, US Navy and US Air Force units have trained at Fort Pickett, with new construction and renovations continuing to support the training mission. In 1995, Fort Pickett was selected for closure under the BRAC. Since 1995, the installation has been known as Maneuver Training Center (MTC)-Fort Pickett and operates as a heavy training center.

#### Current Cleanup Program Activity at ARNG-MTC Fort Pickett

Performance Based Contract (PBC) was awarded in FY05.

#### **IRP**

- Prior Year Progress: PBC for Remedial Investigation (RI)/Feasibility Study (FS) and remediation of Former PCB Storage Area was awarded in FY05.
- Future Plan of Action: Continue work on the RI for soil and groundwater at the Former PCB Storage Area to determine if remediation is required or if a risk assessment will suffice.

#### **MMRP**

- Progress to Date: The SI determined that the single MMRP site at this installation, BCT-001-R-01, is located on an operational range and this site was therefore made RC following the completion of the SI phase.
- Future Plan of Action: None

## **ARNG-MTC Fort Pickett**

Installation Restoration Program



## Total Army Environmental Database – Restoration (AEDB-R) IRP Sites/AEDB-R Sites with Response Complete: 1/0

Site Type: 1 Storage Area

#### Most Widespread Contaminants of Concern:

Metals (Lead and Arsenic) and Aroclor 1260

Media of Concern: Soil and possibly shallow groundwater

## Completed Removal (REM)/Interim Remedial Action (IRA)/Remedial Action (RA):

RA(C) underway at FTPIC-01

#### Total IRP Funding

Prior Years (up to FY05	5):	\$ 1,356,895
Current Year Funding (	FY06):	\$ 0
Future Requirements (F	-Y07+): .	\$ 805,000
Total:		\$ 2,161,895

#### **Duration of IRP**

Year of IRP Inception: 1997 Year of IRP RC: 2007

Year of IRP Completion including Long-Term Management (LTM): 2012

### **IRP Contamination Assessment**

#### IRP Contamination Assessment Overview

The Department of Army Base Realignment and Closure (DA BRAC) office supplied funding for the characterization of the areas of concern (AOCs) identified on the draft AOC list. The characterization consisted of the preliminary assessment (PA) (\$219,325), site inspection (SI) (\$604,490), photo interpretation survey (\$30,000), and radiation closeout survey (\$45,000) at ARNG-MTC Fort Pickett.

The Secretary of the Army and the Adjutant General of Virginia entered into a facility use agreement (FUA) on 30 September 1997. The agreement lays out the roles and responsibilities for use and activities at the facility.

A draft list of AOCs was developed and negotiated in January 1998. The list is based on the environmental baseline survey (EBS) dated 25 February 1997, as supplemented by an ordnance and explosives archive search dated April 1997, and a radiological survey dated 11 September 1996.

The BRAC office agreed to fund characterization of the AOCs. The characterization was conducted through a PA and SI. The PA was completed in February 2000. A total of 41 PA sites were identified and evaluated. There were 33 sites continued into the SI phase of work. The Phase I SI fieldwork was completed in April 2000. The second Phase (Ia) SI fieldwork was completed in August 2000. The final SI report was completed in July 2003.

One of the provisions of the FUA was to conduct a historical aerial photographic analysis of the entire facility. Environmental Research Inc. (ERI) was the contractor that conducted the fence-to-fence historical aerial photographic analysis of ARNG-MTC Fort Pickett. Nineteen suspect areas were identified, site visits were conducted by National Guard Bureau (NGB), Virginia Army National Guard (VAARNG), United States Environmental Protection Agency (USEPA) and Virginia Department of Environmental Quality (VDEQ) at all of these areas and none were carried forward for further investigation. No additional sites were identified through the historical aerial photographic analysis. The historical aerial photographic analysis was also used to identify likely locations to sample at existing AOCs on the draft AOC list.

US Army Center for Health Promotion and Preventive Medicine (USACHPPM) conducted the Industrial and Environmental Radiation Survey, Facility Close-out Survey, radiological survey to clear areas designated in the AOC list of radiological contamination. The Industrial and Environmental Radiation Survey, Facility Close-out Survey and the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) methodology found no evidence of radiological contamination that would threaten human health and the environment at any of the AOCs where radioactive commodities were used or stored at the facility.

The SI addressed the portion of ARNG-MTC Fort Pickett in the cantonment area that is operated by the VAARNG. Sampling and analysis were performed at sites recommended for further investigation in the *Final PA Report* and other sites agreed upon among

### **IRP Contamination Assessment**

VAARNG, NGB, EPA, and VDEQ. The purpose of the SI process is to determine if sites recommended for further investigation during the PA contain hazardous substances at concentrations that pose a potential threat to human health and the environment. The ARNG-MTC Fort Pickett SI was focused toward investigation of areas with the greatest likelihood of contamination. Targeted sampling of potentially affected media was performed at these sites to determine if the sites could be granted "no further action" (NFA) status, or if additional investigation was warranted.

The following conclusions were developed, based on the results of the SI:

The Former PCB Storage Area (PA-35) is the only site that was determined to be is ER,A eligible. Based on the human health screening performed the Former PCB Storage Area (PA-35) exhibited unacceptable risk under industrial exposure scenarios and ecological risks.

Former PCB Storage Area (PA-35) At the Former PCB Storage Area, metals (Lead and Arsenic) and Aroclor 1260 were detected at elevated concentrations in surface soils. These concentrations exceeded human health and ecological risk benchmark values, and could not be attributed to background. Therefore, a limited soil removal is recommended in the area downslope of the concrete pad at the Former PCB Storage Area. This site is ER,A eligible.

#### IRP Cleanup Exit Strategy

A PBC is being used to complete the investigation and remedial actions at the Former PCB Storage Area. It is expected that a soil removal action will be conducted and that groundwater remediation will not be necessary. Groundwater monitoring will be performed until FY12 and include a 5-year review.

## Previous Studies 1999

- Aerial Photographic Site Analysis, ARNG-MTC Fort Pickett Army National Guard Enclave, Blackstone, VA, Environmental Research, Inc., - April 1999
- Industrial and Environmental Radiation Survey Protocol No. 27-MH-1455-P-55, ARNG-MTC Fort Pickett NGB, Blackstone, VA, - August 1999

#### 2000

- Preliminary Assessment Report for ARNG-MTC Fort Pickett, Blackstone, VA, Montgomery Watson (MWH), - February 2000.
- Final Site Inspection Work plan, ARNG-MTC Fort Pickett, Blackstone, VA, MWH, -February 2000.
- Industrial and Environmental Radiation Survey No. 26-MF-1455-00, Facility Closeout Survey, ARNG-MTC Fort Pickett National Guard Bureau, Blackstone, VA, - March 2000.

## **IRP** Contamination Assessment

#### 2003

• Final Site Inspection Report, ARNG-MTC Fort Pickett, Blackstone, VA, MWH, - July 2003.

#### 2005

- Final Project Management Plan, MKM, July 2005.
- Draft Final Sampling and Analysis Plan for Cleanup of Former PCB Transformer Storage Area (PA-35) at the Fort Pickett Army National Guard – Maneuver Training Center (ARNG-MTC) Fort Pickett, Virginia, MKM, - September 2005.

## **ARNG-MTC Fort Pickett**

Installation Restoration Program
Site Description

## FTPIC-01 Former PCB Storage Area

#### SITE DESCRIPTION

At the Former PCB Storage Area, located in the southeast portion of the cantonment area, metals (Lead and Arsenic) and Aroclor 1260 were reported at elevated concentrations in surface soils. These concentrations exceeded human health and ecological risk benchmark values, and could not be attributed to background. Therefore, a limited soil removal is recommended in the area downslope of the concrete pad at the Former PCB Storage Area. The dimensions of the concrete pad and drainage swale are approximately 250 feet by 150 feet. The raised and covered shed was used for storage of out-of-service transformers from approximately 1981 to 1989.

The Performance Based Contract was awarded in May 2005. The Field Sampling Plan was sent to VDEQ for comment in October 2005. VDEQ comments were received in December 2005. The final Field Sampling Plan will be distributed in February 2006.

#### **STATUS**

**REGULATORY DRIVER: CERCLA** 

RRSE: High

**CONTAMINANTS OF CONCERN:** 

Lead, Arsenic, Aroclor 1260

**MEDIA OF CONCERN:** 

Soil, Groundwater

<u>Phases</u>	Start	<u>End</u>
PA	199806	200002
SI	200001	200309
RI/FS	200412	200604
RD	200508	200701
RA(C)	200508	200709
LTM	200710	201209

**RC DATE: 200709** 

#### **CLEANUP STRATEGY**

The public notices of a Remedial Investigation (RI) are being prepared and fieldwork will begin in March 2006. It is expected that a soil removal action will be conducted and that groundwater remediation will not be necessary. Groundwater monitoring will be performed until FY12 and include a 5-year review.

Initiation of IRP: 1997

#### Past Phase Completion Milestones

#### 2000

• PA Completion

#### 2003

• SI Completion

Projected Record of Decision (ROD)/Decisions Document (DD) Approval Date: 2006

**Projected Construction Completion Date of IRP: 2007** 

Schedule for Next Five Year Review: 2012

Estimated Completion Date of IRP (including LTM phase): 2012

#### ARNG-MTC FORT PICKETT IRP SCHEDULE

(Based on current funding constraints)

AEDB-R#	PHASE	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
FTPIC-01	RA(C)									
	LTM									

#### **Prior Years Funds**

Year	Site Information	Expenditures	FY Total
FY98	PA/SI	\$249,325	\$249,325
FY99	PA/SI	\$649,490	\$649,490
FY05	RI/FSRA(C)	\$408,080 \$50,000	\$458,080

**Total Funding up to FY05: \$1,356,895** 

#### **Current Year Requirements**

Year	Site Information	Requirements	FY Total
FY06		\$0	\$0

**Total Requirements FY06: \$0** 

Total Future Requirements: \$805,000

Total IR Program Cost (from inception to completion of the IRP): \$2,161,895

## Community Involvement

A RAB for the ER,A site is not anticipated. A Public Communication Plan has been developed as part of the Sampling and Analysis Plan for Cleanup of Former PCB Transformer Storage Area (PA-35) at the Fort Pickett Army National Guard – Maneuver Training Center (ARNG-MTC) Fort Pickett, Virginia, MKM, - September 2005.